Clark County Department of Building & Fire Prevention

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FIRE PREVENTION: PERMIT GUIDE

Industrial Ovens

This guide is to assist in the permitting process for obtaining an annual renewable operational permit to operation an industrial oven regulated by Chapter 30. An annually renewable operational permit is required per section 105.6.24 of the IFC.

PERMIT REQUIREMENTS:

- An Industrial Oven Permit is required for all Industrial Ovens that have total input exceeding 150,000 Btu/hr. or have the presence of flammable volatiles or combustible material processed or heated in the furnace.
- A fire protection system is **not** needed for the oven in addition to your Industrial Oven Permit when you can demonstrate or provide the following information for the oven.
 - ➤ Demonstrate by calculation that the combustible concentration in the heating chamber **cannot exceed 25% of the Lower Flammability Limit (LFL).** See CCFC sections 3006.1 and 3006.2
 - ➤ Provide the Material Safety Data Sheet (MSDS) or Safety Data Sheet (SDS) for the powder being used in powder coating showing that is has volatiles.

APPLICABLE CODES:

The following codes and standard apply to this permit.

- *International Fire Code*, 2018 edition (IFC)
- Clark County Fire Code Amendments, 2018 edition (CCFC)
- NFPA Standard for Ovens and Furnaces, NFPA 86 2019 Edition

Link to CCFC: See the amendments to codes using the link below:

https://cms8.revize.com/revize/clarknv/Building%20&%20Fire%20Prevention/Codes/ClarkCounty_FireCodeAmendmens2018.pdf?t=1598331770575&t=1598331770575

SUBMITTAL REQUIREMENT CHECKLIST:

The listed requirements in this guide are not intended to be all inclusive, nor do they entail a limit to the extent of the information, etc., which may be necessary to properly evaluate the submitted plans and documents. Not all items may apply to your project.

Construction Documents: Provide all applicable information that pertains to your permit.

- 1. Project name, address, and APN (Assessor's Parcel Number).
- 2. Contractor's/Owner's contact information.
- 3. Provide **Submittal** showing the following items and information.
 - Provide a complete floor plan for the project showing the operation locations and equipment, the location of oven (include length and width), ensure there is a minimum separation distance of 2.5 feet for any unrelated stock /combustible materials from the oven.

- Show the fire extinguisher location(s) and type(s):
 - Provide extinguishers in accordance with IFC 906, depending on type of material utilized and class of fire hazards present.
 - Extinguishers shall be provided no closer than 15ft no more than 50ft
- If there are flammable/combustible volatile(s) present you must.
 - A. Identify the fire suppression system for the oven. See Permit Requirements above for additional information.
 - B. Identify the ventilation for the oven.
 - Ensure separate exhaust system is provided.
 - ➤ Identify the system interlocks. The conveyors and fuel source are to shut down if ventilation system fails.
 - ➤ Identify the High Temperature Limiter Switch and state the maximum temperature set point. (This device will shut down the heat source if operating temperature exceeds the set point.)
 - C. State the temperatures at combustible ceilings and floors; (to be less than $160^{\circ}F/71^{\circ}C$.)
 - D. Identify the fuel piping and source:
 - > State the fuel source for oven and amount stored; if applicable.
 - ➤ Identify the shut-off valve locations: (ensure that the valve position has a permanent visual indicator of the Open and Closed positions. It shall be located remote from furnace and readily accessible.
 - ➤ Show that the fuel supply lines are within 6 feet of the oven served.
- 4. Provide a copy of manufacturer's specification sheets for the oven including the engineering standard for the unit. All equipment shall be listed for its use.
 - *For Class A solvent atmosphere ovens*: Provide copy of the oven nameplate with the following design data:
 - > Solvent used:
 - > The number of gallons used per batch or per hour of solvent entering the oven:
 - The required purge cycle time (seconds).
 - > The oven operating pressure.
 - The exhaust blower rating in cubic feet pe minute (cfm) for the number of gallons of solvent per hour or batch at the maximum operating temperature:
 - For low-oxygen ovens: the maximum allowable oxygen concentration shall be included in place of the exhaust blower rating.

PERMIT DURATION:

Industrial Oven permits are Operational Permits and are limited to a duration of one (1) year and shall be renewed annually. If any changes are made; revisions will need to be submitted.

HOW TO SUBMIT:

Plans are to be submitted electronically. Paper plans are no longer accepted. Consolidate your files and uploaded via the Clark County Citizen Access Portal:

https://citizenaccess.clarkcountynv.gov/CitizenAccess/Default.aspx

Permit Guide: Industrial Ovens continued:

COMMUNICATION:

Once your plans are submitted you will receive a permit number (example= FP20-00000). Plan status can be viewed by logging into your account in the Citizen Access Portal and typing in your permit number. https://citizenaccess.clarkcountynv.gov/CitizenAccess/Default.aspx

CONTACT PERSON ON APPLICATION: Ensure the correct contact person is provided on the application as this will be the correspondent who receives all the email updates on the permit status once plan is submitted.

ADDITIONAL INFORMATION NEEDED: If you receive this request Fire Annual/Operational In-take has reviewed your submittal and there is additional action needed for the plan to be placed back in the Review Queue.

PLANS APPROVED: Once plans are approved, and fees are verified; an email will be sent to the contact person. In order for inspections to be scheduled any outstanding **fees** will need to be paid.

PLANS- CORRECTIONS REQUESTED: Once corrections are issued an email will be sent to the contact person indicating the additional changes needed for an approval. Customer will log in to Citizen Access Portal and download Redlined plans for comment.

FIRE PLAN REVIEW STAFF CONTACT LINK:

https://files.clarkcountynv.gov/clarknv/Building%20&%20Fire%20Prevention/Phone/WEBSITE%20PHONE%20LIST Fire%20Prevention.pdf?t=1616562454375&t=1616562454375

RE-SUBMITTALS, REVISIONS AND RENEWAL:

CORRECTIONS: Corrections will be submitted using the Citizen Access Portal. A letter describing the changes shall be provided with your revised submittal. **Please Note:** The Redlined plans are already in the file and do not need to be uploaded again.

REVISIONS: If plans are revised after approval; revisions will need to be submitted and approved prior to **FINAL** sign off. Revisions will be submitted the same way as the original (See Ways to Submit above). All changes should be **clouded and keyed** to Plan Revision# (FP20-00000-R001). A Revision Letter shall also be provided indicating what changes were made and where they occur.

RENEWAL: After approval of your initial permit; the permit will be set up on an automatic reminder. Approximately 30-60days prior to the expiration of your permit, a renewal notice will be emailed to you with instructions for the renewal.

SUBMITTAL SERVICE LEVEL OPTIONS/FEE SCHEDULE:

https://www.clarkcountynv.gov/government/departments/building fire prevention/permit iss uance/fees.php

INSPECTION OPTIONS/INSPECTION SCHEDULING:

Use the following link for scheduling permits for construction.

https://www.clarkcountynv.gov/government/departments/building fire prevention/inspection/schedule an inspection.php

Annual Renewable Permits will be tentatively scheduled upon approval by Fire Prevention Plans Check and payment of all fees. A Clark County Fire Prevention Inspector will contact you.